

NOTES ABOUT NEEM

By Josie Hughes
(adapted from several 1998 MRS Newsletters)

I am a fledgling rosarian who is interested in the possibility of growing roses organically; therefore, I am always interested when a new product comes on the market and claims to help one grow good roses without harming people, animals or beneficial insects.

On Monday, June 15th at 6:00 P.M., I began spraying my roses with a neem product, **Neemachtin**, an “organic botanical insecticide” spray concentrate, marketed as a “Japanese Beetle Repellent.” It is manufactured by Sure Fire Products and can found at any Tru-Valu hardware store. There are a number of neem based products on the market. One has been highly advertised, **Rose Defense**; but I have avoided it because of hearing a number of negative comments about it. An organic, botanical insecticide “Japanese Beetle Repellent,” a.k.a. **Neemachtin**, seemed to me to hold a lot of promise and I decided to give it a fair test.

On Tuesday, after a drizzly night, I noticed a marked decrease in aphids and was about to do a victory dance when I spotted two Japanese beetles munching on a bloom of **Tiffany**. And so, I sprayed again.

As of Wednesday evening, I have sprayed yet a third time due to a severe thunderstorm last night. Today, I noticed one mobile beetle on a blossom of **Elina**. Even though I was spraying at the time, instinct suggested I squash it, which I did and with minimal qualm.

I am using no other spray material at this time and have put my baking soda and soap spray on hold. I have read that neem can repel beetles and aphids and can even control blackspot. Wouldn't it be wonderful if neem could do all of that in my backyard?

Becoming enthusiastic about my neem project, I consulted several agencies about it. Ted Rogers, of the National Organic Standards Program (a branch of the U.S.D.A.) in Washington, D.C. mentioned that neem holds such promise, that in his department it is known as “birth control for bugs.” He assured me that neem, when used properly, is harmless to animals and beneficial insects. The Cooperative Extension Service of Baltimore County's representative stated that neem is still being tested for its efficacy. She also mentioned that her department is predicting a low beetle year, due to last summer's drought. Hope she is right and that **Neemachtin** takes care of the drought survivors!

The agencies and the makers of **Neemachtin** are emphatic about the following instructions:

1. Do not spray if temperature is over 90°. Apply spray in early morning or late afternoon.
2. Do not mix neem solution with any other spray material.
3. Do not use any left-over solution. Spray should be used within eight hours of mixing.
4. Follow the label instructions carefully. For example, I use 3 tbs. of **Neemachtin** (well shaken) with ½ gallon of water. This will cover about 50 rose bushes. Adding more **Neemachtin** to the solution won't repel more beetles, it will only burn the foliage. If I see any leaf curl or leaf burn, I will stop spraying immediately. Foliage burn was one of the complaints about **Rose Defense**.

As of Thursday morning, there aren't any beetles and hardly any aphids. I noticed no burning of foliage and only a slight petal discoloration on **Sally Holmes**, a white floribunda, and **Fair Bianca**, a white shrub. My other light-colored roses, **Elina**, **Iceburg** and **Baltimore Belle** look fine, as do all other blooms. The foliage looks glossy and I don't see any additional blackspot.

This test of neem, admittedly, has been very brief, but I'll keep hoping the neem keeps working. I'll provide a more complete and meaningful report in the next issue of the Newsletter. -JH

There can't be much doubt that an effective insecticide based on products from the neem tree is a real possibility and will be a welcome addition to the rose growers' arsenal; however, it seems there are problems in the laboratory or manufacturing facilities in producing a safe, reliable and effective product which is easy to use and has a reasonable shelf life. It will happen some day. Let's hope **Neemachtin** solves the insecticide problem. I will follow Josie's experiment with interest.

NEEM REVISITED

By Josie Hughes

(adapted from the September – October 1998 MRS Newsletter)

[In the above article from the MRS Newsletter, Josie wrote of a project which she had just begun to try a new approach to the control of blackspot and Japanese beetles in her rose garden. In this issue she comments further on her experiment and reaches certain conclusions and a plan of action for the balance of this year and for the 1999 growing season. -Ed]

**“Oh Rose, thou art sick!
The invisible worm,
That flies in the night
In the howling storm,**

**Has found out thy bed
Of crimson joy,
And his dark secret love
Does thy life destroy.”**

William Blake, Songs of Experience

In this case, it is the highly visible Japanese beetle which destroys roses; and it is our job as rose growers to neutralize the perpetual enemy, if at all possible!

At the time of the last writing, I had just begun to use a new product, for me, **Japanese Beetle Repellent**, manufactured by Concep, Inc. in Oregon. (For convenience, in the following, I will refer to their product as JBR).

On Thursday, June 18th, I visited Al Ford's enchanting rose domain. After a rose tour and a cup of tea, we had a chat about neem-based products. He cautioned me to watch out for leaf curl and leaf burn. That evening, having already started with the use of JBR, I did notice some leaf curl. The next day, I telephoned Concep, Inc., in Oregon and told the representative with whom I spoke of the leaf curl problem. She concluded that I had sprayed too frequently even though it had rained several evenings in a row, and even though the instructions advised to spray after

heavy rainfall. Her suggestion was that I hold off on further spraying for five days and then to use JBR at half strength, 3 tablespoons per gallon rather than the label recommendation of 6 per gallon.

My call was on the 19th of June, and I didn't spray again until July 1st because of very hot weather. During the period June 19th to July 1st, I removed only two beetles per day from my 70 rose bushes. This rate, following the use of JBR was down from 80 to 100, before its use. This neem product, JBR, was doing something. Pretty nifty!

Also, a section of my rose garden remote from other roses was not sprayed during the test period, for control purposes. This section consists mostly of floribundas, which were always encrusted with beetles. This suggests that 1998 was, for my part of the rose growing country, a normal beetle year.

The conclusion I have reached from my experimentation is that for Japanese beetle control, **Japanese Beetle Repellent** works for me and I will continue its use as an insecticide as needed, certainly next year at beetle time. Although I have not referred to other injurious insects, I should mention that my usual problem with aphids was completely controlled this year, and I was not confronted with problems from other insects.

JBR's efficacy, at half label strength recommendation, for me, seems to be about nine days. I apply the spray with a hand pump sprayer, usually in the early evening. I have noted slight leaf curl on some varieties, but none on other varieties. While I am intrigued to find an effective organic insecticide, it must be used with caution. There is a danger to the rose plants if the solution is too strong and/or if it is used too often.

During my experiment, I was aware that at least one rose grower I had read about had good results against blackspot by using a neem-based product. With this in mind, I refrained from the use of a fungicide (I usually use **Orthonex: Ortho Rose Pride**) during part of the test period to see if JBR--a neem based product--would help with the usual blackspot problem. It didn't take long for me to learn that JBR, which admittedly, is sold as an insecticide, had no effect on blackspot. Therefore, I went back to using **Rose Pride** .

As you may recognize, I am a rose grower and enthusiast who would like to dispense with the use of chemicals in my garden. This is why I was willing to try Japanese Beetle Repellent on my previous aphid and beetle problem. Recently, I came across an organic product which purports to control insects and blackspot, mildew and rust. It is named **Organic Rose & Flower Dust/Spray** and is available from Gardens Alive in Lawrensburg, IN. I'm still looking for a single spray which will control my rose garden problems, but aren't we all? I'll try it on a part of my rose garden next year and if it works, I'll let you know.-Josie

The Use of an Insecticide Spray

A Note From Josie Hughes

Josie's article on her spray program, which appeared in the Sept-Oct 1998 issue of the Newsletter, seemed to suggest that Josie uses **Rose Pride** , a combined insecticide and fungicide, every week. Josie wishes to correct this impression by adding that she does not use an **insecticide** every time she sprays. Her regular **fungicide** spray, used every week, consists of 3 table spoons of baking soda plus a few drops of horticulture oil to a half gallon of water. She also commented that she grows garlic among her roses as a further deterrent to blackspot. Josie substitutes **Rose**

Pride for her regular spray only when garden conditions dictate its use. She commented also that her use of **Japanese Beetle Repellant**, an organic insecticide, is at half the label recommended strength and twice the time interval between spraying, 7 to 10 days versus every 4 to 7 days. She has found that the adjusted strength and time interval tends to prevent leaf curl or burn. As her article acknowledged, Josie --like so many other rosarians-- is still searching for the best product to control blackspot.

-Editor

Maryland Rose Society Newsletter

Albert Ford, *Editor*

<http://www.mgs.md.gov/misc/mdrose>